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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,760	01/04/2002	Anthony A. Sauve	96700/725	6299

7590 08/07/2003

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EXAMINER

MCINTOSH III, TRAVISS C

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

File Copy

Office Action Summary

Application No.

10/038,760

Applicant(s)

SAUVE ET AL.

Examiner

Traviss C McIntosh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 6-9, 12-13, 16-17, and 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11, 14, 15, 18, 19 and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5&9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Detailed Action

Acknowledgment is made of the Preliminary Amendment filed June 4, 2003 in which applicant added new claims 30-37.

Election/Restrictions

Applicant's election of the species wherein A is an N-linked heterocyclic compound in Paper No. 10 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant's state that claims 1-5, 10, 11, 14, 15, 18, 19, and 30-37 read on the species elected.

An action on the merits of claims 1-5, 10, 11, 14, 15, 18, 19, and 30-37 is contained herein below.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5, 10, 11, 14, 15, 18, 19, and 30-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite wherein it is unclear as to why the variable A is in parenthesis. The use of parenthesis around a variable represented by a single letter is not standard practice, and the examiner is unsure as to what applicants intend by the use of the parenthetical variable.

Claim 1 is indefinite wherein applicant uses confusing alternative language. Applicants recite: "D is a primary alcohol, a hydrogen, or an oxygen, nitrogen, carbon, or sulfur linked to phosphate, a phosphoryl group, a pyrophosphoryl group, or adenosine monophosphate through a phosphodiester or carbon-, nitrogen-, or sulfur-substituted phosphodiester bridge or to adenosine diphosphate through a phosphodiester or carbon-, nitrogen-, or sulfur-substituted pyrophosphodiester bridge". Does applicant intend D to optionally be a phosphoryl group? Clarity is respectfully requested.

Claim 3 is indefinite wherein the claim recites "a substituted pyridyl group" or a "substituted pyrimidyl group". In the absence of the identity of moieties which are intended to be substituted onto the pyridyl or pyrimidyl core, the identity of the moieties effectuating a modification or substitution onto the core would be difficult to ascertain. In the absence of said moieties, the claims containing the term "substituted" are not described sufficiently to distinctly point out that which applicant intends as the invention.

All claims which depend from an indefinite claim are also indefinite. *Ex parte Cordova, 10 U.S.P.Q. 2d 1949, 1952 (P.T.O. Bd. App. 1989).*

Claim Rejections - 35 USC § 102

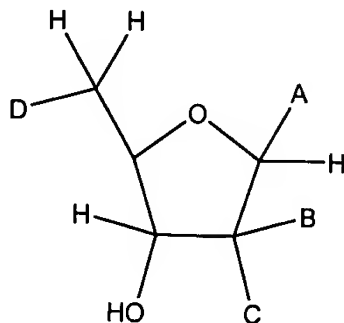
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

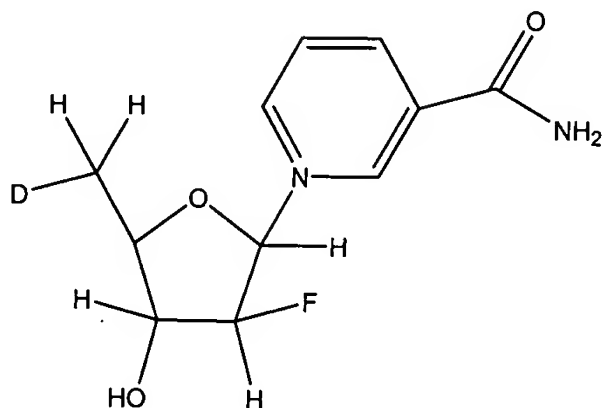
Claims 1-4, 10-11, and 30-32 are rejected under 35 U.S.C. 102(a) as being anticipated by Sauve et al. (Document #10 of IDS filed April 24, 2002: "A Covalent Intermediate in CD38 is Responsible for ADP-Ribosylation and Cyclization Reactions", J. of the American Chemical Society, vol. 122, no. 33, Aug. 23, 2000).

Claims 1 and 2 of the instant application are drawn to the compound of the formula:



wherein B and C are optionally H or halogen, D is optionally an O-linked to a phosphate group, and A is a N-linked heterocyclic group. Claims 3 and 4 limit A to a nicotinamide group. Claims 10-11, and 30-32 limit B and C to either of both are H or one is H and the other is halogen, amino, or thiol group.

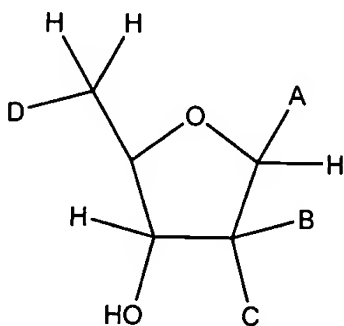
Sauve et al. disclose a compound in column 2, page 7856 (ara-F-NMN⁺) which is represented by the structure:



wherein D is disclosed as being an O-linked to a phosphate group. The moiety in the A position of the instantly claimed compound is nicotinamide. The structure of Sauve et al. is seen to anticipate the instant application's claims 1-4, 10-11, and 30-32.

Claims 1-3, 10-11, 14-15, 18, 30-33, and 36 are rejected under 35 U.S.C. 102(a) as being anticipated by Von Borstel et al. (US Patent 6,103,701).

Claims 1 and 2 of the instant application are drawn to the compound of the formula:

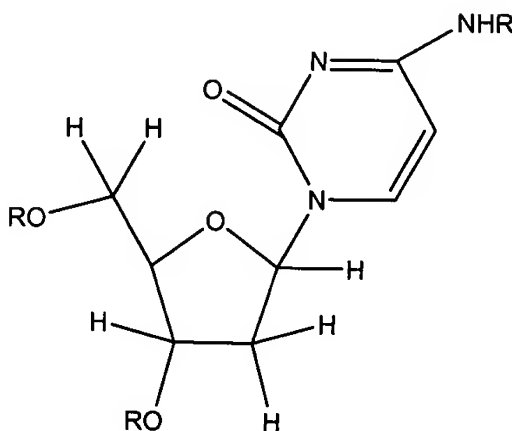


wherein B and C are optionally H or halogen, D is optionally a phosphoryl group, and A is a N-linked heterocyclic group. Claim 3 limits A to optionally a substituted pyrimidyl group. Claims 10-11, and 30-32 limit B and C to either of both are H or one is H and the other is halogen,

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amino, or thiol group. Claims 14, 15, and 33 limit D to a primary alcohol or H. Claims 18 and 36 are drawn to a composition comprising the compounds of claims 1 and 3 and a carrier.

Von Borstel et al. discloses a compound in column 6, formula III, represented by the structure:



wherein R is disclosed as being H or an acyl radical. The moiety at the A position of the instantly claimed compound is seen to be a substituted pyrimidinyl group. Von Borstel et al. show the compounds to be effective in compositions when combined with pharmaceutically acceptable carriers (column 22, lines 28-38). The structure and compositions of Von Borstel et al. are seen to anticipate the structures and compositions of claims 1-3, 10-11, 14-15, 18, 30-33, and 33 of the instant application.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Traviss McIntosh whose telephone number is 703-308-9479. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Traviss C. McIntosh
August 4, 2003



James O. Wilson
Supervisory Patent Examiner
Art Unit 1623